VZCZCXRO0571 RR RUEHCN RUEHGH DE RUEHGH #0541/01 2390821 ZNR UUUUU ZZH R 270821Z AUG 07 FM AMCONSUL SHANGHAI TO RUEHC/SECSTATE WASHDC 6182 INFO RUEHBJ/AMEMBASSY BEIJING 1360 RUEHCN/AMCONSUL CHENGDU 0846 RUEHGZ/AMCONSUL GUANGZHOU 0826 RUEHHK/AMCONSUL HONG KONG 0968 RUEHSH/AMCONSUL SHENYANG 0848 RUEHUL/AMEMBASSY SEOUL 0102 RUEHGP/AMEMBASSY SINGAPORE 0074 RUEHIN/AIT TAIPEI 0670 RUEHKO/AMEMBASSY TOKYO 0181 RUCPDOC/DEPT OF COMMERCE WASHINGTON DC RHEGGTN/DEPT OF ENERGY GERMANTOWN MD RUEATRS/DEPT OF TREASURY WASHINGTON DC RUEHGH/AMCONSUL SHANGHAI 6632

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USDOC FOR ITA/MAC DAS KASOFF, MELCHER AND MCQUEEN
TREASURY FOR DOHNER/SOBEL/CUSHMAN/MOGHTADER/WINSHIP
TREASURY FOR WRIGHT AND AMB HOLMER
NSC FOR WILDER AND TONG

E.O. 12958: N/A

TAGS: ENRG SENV EINV EIND CH

SUBJECT: SHANGHAI ASKS DOE FOR HELP CUTTING ENERGY USE

- (U) This cable is sensitive but unclassified and for official use only. Not for distribution outside of USG channels or via the internet.
- 11. (SBU) Summary: A Department of Energy delegation led by PDAS John Mizroch met with municipal officials, academics, and U.S. businesses during its August 16-17 visit to Shanghai. Shanghai's inefficient energy consumption limits its economic growth and contributes to its pollution problems. Shanghai hopes to cut energy consumed per unit of GDP by 20 percent in time for the 2010 World Expo. Areas identified by the delegation and its official interlocutors for future discussion and cooperation include industrial energy consumption assessments, bio-fuels, and energy efficient buildings. U.S. companies are keenly interested in providing their technological solutions to energy efficiency problems, but note that Chinese businesses would need to stop focusing on initial price without regard to long-term savings before their products would be competitive. End summary.
- 12. (SBU) Department of Energy (DOE) PDAS John Mizroch led a delegation to Shanghai August 16-17. He was accompanied by DOE Office of Technology Advancement and Outreach Director Amy Chiang, DOE Office of Energy Efficiency & Renewable Energy Senior Executive Board Member Mark Ginsberg, DOE Office of Energy Efficiency Social Scientist James Quinn, Oakridge National Laboratory R&D Staff Member Michaela Martin and TMS, Inc. Consultant Alan Gagnet. The purpose of their trip was to discuss areas of cooperation and collaboration on bio-fuels, green buildings and industrial energy efficiency with Shanghai government and academic officials. The delegation also hosted a roundtable of U.S. business leaders in Shanghai to discuss DOE assistance in promoting U.S. technologies in China.

- 13. (SBU) On August 16 the delegation met with Shanghai (SHDRC) Chief Economist Zhou Ya, SHDRC Planning Department Yang Hongwei, and SHDRC Department of Energy Development Acting Director Zhang Lihong. Zhou made it clear from the beginning that the SHDRC viewed this meeting as an introductory meeting and not one that would have specific outcomes. Their interest in working with the DOE on energy efficiency issues was clearly piqued, however, as soon as the delegation mentioned their productive meetings with the Beijing Development and Reform Commission.
- 14. (SBU) Zhou said that by July 2007 Shanghai's annualized GDP growth had reached 13 percent. In 2006, Shanghai's GDP was RMB 1.28 trillion (USD 169 million) and to produce this output, Shanghai consumed 89 million tons of coal equivalent (TCE) worth of energy. Of this energy consumption, 37 percent was used by the iron/steel and petrochemical industries.
- 15. (SBU) Zhou said that Shanghai had just established an energy efficiency working group, led by Shanghai Mayor Han Zheng, to achieve the 20 percent reduction in energy consumption per unit of GDP called for by the Central government by 2010. This working group's first meeting was August 16.
- 16. (SBU) Zhou and PDAS Mizroch discussed three areas for future cooperation: 1) The design and construction of a green/zero-energy building for display at the 2010 Shanghai World Expo; 2) Energy savings in government-invested public buildings such as hospitals; and, 3) Zhangjiang High-tech Park. Ms. Zhang Lihong was designated at the point of contact for future discussions.

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Shanghai Economic Commission

- 17. (SBU) The delegation met with Shanghai Economic Commission (SHEC) Vice Director Gao Yun and SHEC Deputy Director Li Yunhu on August 16. Gao noted that the SHEC appreciated its ongoing cooperation with the United States on energy savings and efficiency.
- 18. (SBU) Shanghai's energy consumption growth has been averaging 8 percent per year and Shanghai, said Gao. Since 61 percent of Shanghai's energy consumption was used by industry, the SHEC had focused on increasing industrial energy efficiency. Towards that end, in 2006 the SHEC closed 500 "high energy consuming and polluting" factories for a savings of 500,000 TCE. By the end of 2007, Gao said that the SHEC would have closed down an additional 600 of these factories. He estimated this would result in an additional one million TCE in savings. These factories were largely small-scale operations and included both private and state/city-owned enterprises. They were targeted for closure based on their energy use and pollution produced; they were given the option of changing their production techniques or products to lower their energy waste, or to re-develop the land the factory occupied into residential or commercial buildings.
- 19. (SBU) The SHEC had also identified the 79 largest industrial consumers of energy. These 79 companies consumed 75 percent of all the energy used for industrial purposes -- roughly 50,000 TCE per company per year. These steel, petro-chemical and IT companies have been instructed to compare their energy use with that of other similar companies. Two-thirds of these companies were state- or city-owned enterprises. Gao asked that the DOE provide industry-specific energy consumption benchmark data to assist them in evaluating these companies. PDAS Mizroch also offered to assist SHEC in conducting energy-use audits of these firms as the DOE has been doing in the United States.
- 110. (SBU) Shanghai's growing service sector currently consumed

- 30 percent of Shanghai's energy consumption. The remaining nine percent was consumed by residential users. Gao said that there were 2.4 million vehicles on Shanghai's roads. Two million of these were registered in Shanghai, which has limits on the numbers of vehicles registered per month; the other 400,000 was an estimate of the numbers of cars based in Shanghai, but registered elsewhere.
- 111. (SBU) Gao asked that the DOE provide technical and policy advice on the areas of circular economy and energy efficiency. He hoped that the DOE could provide technology to help Shanghai's businesses overcome the inefficient use of energy. Gao requested that the DOE continue providing assistance to retro-fitting the Shanghai Automobile Museum to make it more energy efficient. He also suggested the possibility of collaborating to design a zero-energy Youth Exhibition Center to showcase environmentally friendly technologies.

Shanghai Energy Conservation Supervision Center

112. (SBU) The delegation met with Shanghai Energy Conservation Supervision Center (SECSC) Director Chen Rumei, SECSC Vice Director Lou Zhenfei and SECSC Senior Engineer Wu Mei on August 116. The SECSC, a division of the SHEC, had primary responsibility for conducting energy consumption audits and analysis and providing policy suggestion to the SHEC and SHDRC for energy efficient policies that comply with Chinese national standards and laws. Most of its staff was engineers. The SESCS provided training for Shanghai officials and industrial leaders

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on techniques to reduce energy consumption. The DOE and SECSC have a longstanding cooperative relationship. The DOE assisted in the development of the SESCS's top-notch exhibition on energy saving technologies and techniques.

Industry Roundtable

- 13. (SBU) On August 17, the delegation briefed more than 30 representatives of 20 American companies in China on the goals of DOE delegation to China. Representatives from the following companies were in attendance: Honeywell, Foster Wheeler, PIM, URS China, Johnson Controls, Rockwell Automation, Dupont, Mammoth China, Owens Corning, Optimira Energy, Sloan, Trane, DE Global, Eco Energy Cities, Eclipse, Maxon, Squire Sanders LLP, Joint U.S.-China Cooperation on Clean Energy, the U.S.-China Business Council, and the American Chamber of Commerce. PDAS Mizroch emphasized that DOE's goal was to assist American companies market and sell their energy-saving technologies in China.
- 114. (SBU) Eclipse Vice President John Searles noted that Chinese companies placed greater importance on a machine's initial purchase price rather than long-term savings that might be gained from a more expensive, but more efficient alternative. Other industry representatives agreed and said that there would need to be a "cultural change" in how Chinese manufacturers viewed industrial purchases. Owens Corning General Manager of Energy Solutions Tom McCawley emphasized the importance of educating consumers through the "change management" process. Delegation member Gagnet suggested that companies consider taking their energy savings technology on a road show with to concretely demonstrate the savings gained.

Shanghai Science and Technology Commission

115. (SBU) Shanghai Science and Technology Commission (SHSTC) Social Development Department Director Ma Xingfa, SHSTC International Cooperation Director Fu Guoqing and SHSTC Program Officer Song Yang met with the delegation on August 17. Ma told

the delegation that 21 of Shanghai's 23 power plants were coal-fired. These plants used 13 million tons of coal per year. His office was working on a plan to close down the smallest, most inefficient power plants in order to reduce carbon dioxide emissions by 2.4 million tons and save one million tons of coal per year.

- 116. (SBU) Ma said that in 2006, for every RMB 10,000 (USD 1,325) of GDP, Shanghai consumed 0.87 TCE. Shanghai's energy structure created a "bottleneck" for Shanghai's continued economic growth since energy consumption and economic activity were closely related. Increased efficiency in the use of energy would allow Shanghai to continue its economic expansion. At this point, Ma said, lack of access to energy was acting as a brake on Shanghai's economic development.
- 117. (SBU) Ma welcomed the DOE's assistance in the development of Shanghai's Clean Energy Resource Center. This entity was created in May 2006 and currently occupied space in an office building in Shanghai's Minhang District. The SHSTC planned to construct its own office building soon and agreed to further discussions with the DOE on how to design it as a zero-energy consuming facility.

Shanghai Jiaotong University Energy Research Institute

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- 118. (SBU) On August 17, the delegation met with Shanghai Jiaotong Univerisity (SJTU) Energy Institute Director Huang Zhen and SJTU Energy Research Institute Professor Yu Lijun. According to Huang, SJTU's Energy Research Institute had 53 full professors and 64 associate professors working in its laboratories promoting interdisciplinary research on energy and environmental solutions. The institute was founded in 2005.
- 19. (SBU) One of the institute's roles was conducting industrial energy audits and assessments. DOE's Ginsberg suggested that one possible area of cooperation would be to coordinate the translation of the DOE's industrial assessment software tool into Chinese for use in China. The two sides also discussed bringing an American academic team with experience in conducting DOE industrial assessments to work with SJTU in its future assessments.
- $\P20.$ (U) The delegation cleared on this report. JARRETT